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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|-----------------------------|------------------|
| 10.074,478 | 02/13 2002 | Jeremiah L. Grimm | AI-21033 (165800-000001) | 7287 |

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EXAMINER

MOITANDESI, IRAJ A

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 05 21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/074,478

Applicant(s)

GRIMM, JEREMIAH L.

Examiner

Iraj A Mohandesi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-16 is/are rejected.
- 7) ☒ Claim(s) 8 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 05/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: The limitation " the axes of the energizable coils " there is insufficient antecedent bases for the limitation . Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 11-7,9,10,13,15** are rejected under 35 U.S.C. 102(b) as being anticipated by **Schaeffer US patent 4,315,171**.

Schaeffer'171 discloses a permanent magnet drive mechanism comprising a frame (76, Fig. 16), a plurality of exercisable coils (see Fig. 18-21) mounted on the frame, a member mounted for movement (36, 38, rotor and hub, Fig. 2) on the frame, and a plurality of permanent magnets (42, column 5, line 50, Fig. 2) mounted on the member, the axes of the exercisable coils disposed substantially at right angles to the axes of the permanent magnets (see Fig. 16-18) whereby, upon energizing of the exercisable coils, the member is moved with respect to the frame (rotor moves with respect to the 76 frame "stator frame"), the member is rotatably mounted on the frame (36, 28, the rotor and hub), and upon energizing of the exercisable coils, the member is rotated on the frame, the permanent magnet and the exercisable coil are equally spaced (Fig. 16).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 3,4,6,7,16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schaeffer'171** and in view of **Rhee US patent 4,55,658**.

Schaeffer'171 discloses a permanent magnet drive mechanism comprising a frame (76, Fig. 16), a plurality of exercisable coils (see Fig. 18-21) mounted on the frame, a member mounted for movement (36, 38, rotor and hub, Fig. 2) on the frame, and a plurality of permanent magnets (42, column 5, line 50, Fig. 2) mounted on the member, the axes of the exercisable coils disposed substantially at right angles to the axes of the permanent magnets (see Fig. 16-18) whereby, upon energizing of the exercisable coils, the member is moved with respect to the frame (rotor moves with respect to the 76 frame "stator frame"), the member is rotatably mounted on the frame (36, 28, the rotor and hub), and upon energizing of the exercisable coils, the member is rotated on the frame, the permanent magnet and the exercisable coil are equally spaced (Fig. 16). However **Schaeffer'171** teaches all limitations of the claimed invention except a control means with a starter coil having a magnet for energizing the exercisable coils,

Rhee'658 discloses a DC motor comprising a control means (4 Fig.1) with a starter coil with magnet(L1a,L1b, Fig.1) for energizing the exercisable coils for the purpose of controlling the electrical current to the coil.

Therefor it would have been obvious to one having skill in the art at the time the invention was made to combine **Schaeffer'171** motor with a starter coil having magnet (L1a,L1b, Fig.1) for energizing the exercisable coils for the purpose of controlling the electrical current to the coil.

With respect to the **claims 11,12,14**.

It would have been obvious to one having skill in the art at the time the invention was made to provide four or eight permanents magnet with four coils on the frame, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch 617 F.2d 272,205 USPQ 215 (CCPA).

Allowable Subject Matter

6. **Claims 8,17-19** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Communication

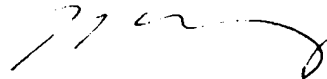
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is (703)305-3242. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-0377.

A handwritten signature in black ink, appearing to be "J. Ramirez", is located below the text of the second paragraph.

IM
May 14, 2003